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Micropsectra spinigera, spec. nov. from Maine, U.S.A.

(Insecta, Diptera, Chironomidae)

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A new Tanytarsini species, *Micropsectra spinigera*, is described as male adult from light trap catches near Dryden, Maine, U.S.A. Specific characters at the hypopygium are the spinous dark brown crests on the anal point, the deeply divided superior volsella, and the branched setae on the inferior volsella. These autapomorphic characters distinguish *M. spinigera* from all other members of the genus.

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Introduction

The mainly holarctic distributed genus *Micropsectra* is well represented in North America (Oliver & Dillon 1990, 1994), but most species are yet undescribed. During determinations of light trap samples from Maine, an unusual species was found. The striking characters at the hypopygium therefore justify a description. For most of the unknown *Micropsectra* species with the usual character combinations a complete revision of at least the species group is neccessary for a worthwile description.

Micropsectra spinigera, spec. nov.

Types. Holotype: 3 adult, U.S.A., Maine, Mt. Blue near Dryden, 8.-22.8.1978, leg. G. Heinrich. – Paratypes: 13, as holotype; 13, Dryden, Bryant Pont, 24.7-4.8.1978, leg. G. Heinrich (type series in Zoologische Staatssammlung Munich).

Diagnostic characters. Three characters, the dark brown, strong spinous crests on the anal point, the branched setae on the inferior volsella, and the deeply divided superior volsella at the hypopygium separate *spinigera* from all other *Micropsectra* species. In addition, the species has a short digitus, and a long median volsella with an apical brush of slender and long lamellae.

Description

Male adult (n = 3)

Wing length 2.0-2.3 mm. Colouration in alcohol preserved specimens light brown. Anal point dark brown.

Head. AR: 1.41-1.45 (n = 2). Frontal tubercles minute, 5-7 μ m long (n = 2).

Thorax. Dorsocentrals 10-11, acrostichals 18-24, prealars 3-4, scutellars 8-12.

Wing. Membrane with dense setation, covering all cells. Also all veins, except of Sc and An with uniserial or multiserial setation.



Fig. 1. Micropsectra spinigera, spec. nov. Hypopygium, dorsal view.

Legs. Apex of fore tibia with short spur. Combs of mid and hind tibiae contiguous, without spurs. $LR_{p1} = 1.73$ (n = 1). Lenghts of legs in µm (holotype):

| | fe | ti | ta_1 | ta ₂ | ta ₃ | ta4 | ta_5 |
|----------------|------|------|--------|-----------------|-----------------|-----|--------|
| \mathbf{p}_1 | 1200 | 900 | 1550 | 750 | 590 | 480 | 220 |
| p_2 | - | - | - | - | - | - | - |
| \mathbf{p}_3 | 1320 | 1290 | 900 | 560 | 420 | 290 | 150 |

Hypopygium (Fig. 1). Anal point strong, apically rounded. Crests high and long, margins serrated, surface spinous. Both, anal point and crests dark brown. Anal tergal bands completely separate,

followed by 5-7 median setae, which partially insert between the basal parts of the crests. Margin of the anal tergite with a long lateral, pointed tooth. Superior volsella deeply divided into two fingerlike lobes; posterior lobe with irregular outline. Basal depression of the superior volsella covered with microtrichia. Digitus short, rounded, not extending beyond the margin of the superior volsella. Median volsella straight, 45-65 µm long, with an apical brush of slender unbranched lamellae. Inferior volsella long, slightly curved medially, not swollen in the apical half; setae strongly branched. Gonostyle straight, apically rounded, median setae long, slightly shortened towards the end.

Systematic position

The generic position of *M. spinigera* is confirmed by genital features: arrangement of median setae on anal tergite; lack of spines between anal point crests; superior volsella with basal depression carrying microtrichia; basal median seta at superior volsella ("*Micropsectra* seta").

Micropsectra spinigera is the only species within the genus with dark spinous and serrated anal point crests. An analogous structure occurs in the palaearctic species *Rheotanytarsus nigricauda*, where the crests are also dark and marginally serrated, but not spinous on the surface (Fittkau 1960). A deeply divided superior volsella does not occur in another described *Micropsectra* species, but a similar, shallower division is present in an undescribed species from the Banff National Park, Canada, provisionally called *Micropsectra* sp.g. Also several described and undescribed *Tanytarsus* species possess analogous structures of the superior volsella. Branched setae on the inferior volsella of a *Micropsectra* species are not described. But this character is sometimes difficult to see, if no phase-contrast microscope is available. The 32 described and several undescribed *Micropsectra* species in the Munich collection show without exception simple setae on the inferior volsella.

The group relationship of *Micropsectra spinigera* is open, since the species does not fit in one of the three accepted species groups: *notescens, bidentata*, and *attenuata*.

References

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